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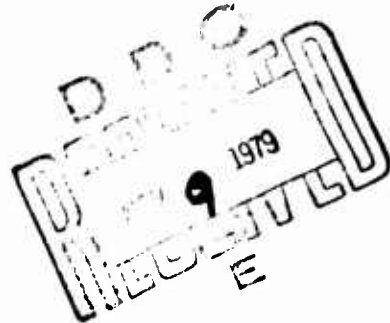
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BRIEF SURVEY CONCERNING MILITARY USE OF THE PHYSICALLY
MARGINAL UNDER MOBILIZATION CONDITIONS

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**"Brief Survey Concerning Military Use of the Physically
Marginal Under Mobilization Conditions"**

Report submitted by Dr. J. S. Orleans, 15 March 1951

Abstract of Report

A brief survey of what is known regarding utilization of the physically marginal personnel was made.

No systematically accumulated data or formal studies concerning the utilization of physically marginal personnel by the Armed Services have been located thus far. Following World War II, approximately 1,400 disabled veterans were permitted to re-enlist. Judgments of the quality of their performance in the jobs assigned have been uniformly favorable. Judgments, however, were based on opinions, rather than on objective data.

References on utilization by foreign countries bear security classifications and were not available to the consultant. Studies of effectiveness of physically impaired persons in civilian industry show that in the majority of instances, this group compares favorably with other workers in production record. There was less absenteeism, fewer accidents and loss of time due to accidents, less labor turnover, and better morale.

By tradition, physical standards for induction into the Army are uniform regardless of future assignment. Despite evidence that this view has been undergoing progressive change since before World War II, tradition has prevailed. The use of limited service personnel during a period in World War II is the only definite departure. However, a proposed revision of physical standards for induction is currently in preparation. The proposal provides for differential standards for varying MOS's and the conditions under which they will be used. A minimum physical profile would be established for each enlisted MOS.

The definition of the term 'physically marginal personnel' is contingent on policy regarding the use of minimal physical standards for induction. Those not meeting whatever standards are set would be considered marginal. If standards are set for specific MOS's in specified types of units, the concept of physically marginal personnel changes accordingly.

Policies to be established and availability of relevant data determine the direction which research studies can take. The report includes discussion of factors to be considered in utilization of physically marginal personnel and a list of research studies which might be conducted.

The report includes also a bibliography on utilization of physically handicapped (mainly civilian).

Brief Survey Concerning Military Use of the Physically Marginal Under Mobilization Conditions

This survey was undertaken in compliance with a memorandum of 15 December 1950 from Dr. D. K. Baier, Chief, Personnel Research Section, A. G. O. to Dr. J. S. Orleans, Expert, A. G. O.

A survey of the literature on this subject was made and interviews were held with a number of persons, who, it was felt, might be able to provide leads for relevant studies and other sources of information, or who might be able to indicate the problems and issues that need to be taken into account. The appended bibliography deals with physically marginal personnel, physical standards, and other related subjects. A preliminary report of 15 February 1951 lists the individuals who were interviewed.

The bibliography does not include any references to the military use of physically marginal personnel other than subjective opinions concerning the performance of 1400 disabled veterans who were permitted to reenlist. No references were available reporting the military use of physically impaired personnel in foreign countries. Such reports are classified documents and therefore not available for this study. Judging from newspaper reports and similar sources, the military use of physically marginal personnel by foreign countries goes back many years. There have been cases of several high ranking officers with only one arm in the British and French armies. The "stomach battalions" of diabetics in the German army of World War II were well publicized. A study of reports on the military use of physically marginal personnel in foreign countries would seem to be essential for the present survey.

The problem under consideration may be broken down into two questions:

- (1) Can physically marginal personnel make a contribution to the armed forces under mobilization conditions?
- (2) If they can make a worthwhile contribution, should they be used in military assignments? Under what conditions? To what extent? What issues need to be considered as a basis for reaching a decision?

The importance of the problem is a matter of relative manpower. It is a matter of our total manpower as against the total available manpower of our prospective enemies, their relative productive capacities, their relative fighting abilities, the number of fronts on which war may take place, and perhaps other relevant factors. It is apparent that the manpower problem may be a serious one for us, particularly in view of the possibility of the outbreak of war on several fronts.

Definition of Terms. It is important, first of all, to be clear on the meaning of terminology to be used. It will be noted that in the following paragraphs the term "physically impaired" is used consistently. The term "physical impairment" implies that the individual lacks something physically. He lacks the use of an eye, or his vision may be very poor. He may lack a leg, or a muscular weakness may seriously limit his use of an arm. He may

suffer from a heart defect. He is physically defective in some respect or other. The term "physical disability" is not in good odor among those who work with the physically impaired--on the ground that the individual is not disabled. His competence may be limited or hampered in one respect or another, but he may be able to live a relatively normal life. He may be competent to hold down a good job and make a good living. He may be handicapped in the sense that he can not do as well as if he did not have an impairment, at least without the exercise of greater effort or care. But he may not be at all handicapped in relation to his job, or perhaps in relation to various other jobs.

The term "physically marginal personnel" may be regarded as including four groups:

1. Women, all of whom are regarded as not meeting the physical standards for men as set by the Armed Services.
2. Men who fall below the minimum physical standards set for induction into the Armed Services, but who do not suffer from an impairment sufficiently severe to include them among the physically impaired.
3. Men with physical impairments who are able to make a contribution to war effort of sufficient scope to justify considering them for military service.
4. Men who are not physically impaired but who are older than the maximum age acceptable for induction, or the maximum age used in the past in drafting personnel.

It may be argued that there is, or should be, no distinction between groups 2 and 3. If the minimum military physical standards were set low enough that might be true. But the standards change from time to time. Many who were rejected by the Army in 1942 were admitted, or would have been admissible, early in 1945 and it can hardly be argued that they should be included in the third group mentioned above.

The question of using women by the Armed Services is one of policy, not one of obtaining evidence of competence to make a notable contribution. The basic policy that they shall be used has already been decided and implemented. There is left only the question of the extent and nature of the use of female personnel and the treatment of them. It would seem pointless to conduct studies to determine their usefulness. The evidence of their competence is overwhelming both in civilian industry and in military circles.

Studies of workers in industry between the ages of 40 and 55, and even older groups,^{1/} show for them records of production, absenteeism, accident frequency, turnover, and stability that compare favorably with records for younger groups. The question of using older personnel is also one of policy and not of competence.

^{1/} See especially: Kossoris, Max D. "Absenteeism and Injury Experience of Older Workers" Monthly Labor Review. July 1948, Bureau of Labor Statistics, United States Department of Labor

Data are available from many sources concerning the effectiveness of physically impaired persons on jobs in civilian industry.^{2/} These studies deal with such matters as work record (amount and quality of work), absenteeism, accident frequency, labor turnover, and morale. An occasional study reveals a poorer record in one or more of these areas for the physically impaired than for the physically unimpaired. But, by and large, the studies show that the production records of the physically impaired, both in quantity and quality, are at least as good as the production records of the physically unimpaired. Among the physically impaired there is on the whole less absenteeism, fewer accidents and less time lost due to accidents, less labor turnover, and better morale.

The findings of these studies are in part opinions of foremen and employers, and in part based on records. The populations studied vary in size from relatively small numbers of concerns and employees to one that included over 1,750,000 workers in 450 plants (including almost 90,000 physically impaired). They include the entire gamut of impairments: poor eyesight, ex-tuberculous, cardiac, orthopedic, cerebral palsy, and various other categories.

Following World War II some 1400 disabled veterans were permitted to reenlist. Reports on the quality of their performance have been uniformly favorable. These reports have been in the form of opinions rather than based on objective evidence.

The question of the use of physically marginal personnel by the Armed Services would then appear to be not whether the physically impaired can make a contribution to war effort. It is, rather, whether they should be used only in civilian capacities, whether any should be employed in military capacities, whether they should be drafted, under what conditions they should be used, and the kinds of problems which arise when they are employed as military personnel.

This contention would appear to be true not only for the physically impaired, but also for such other groups as might be included in the general category of physically marginal personnel--women, older persons, and those who do not suffer serious impairment but who do not meet the minimum physical standards that have been set from time to time for admission to the Army.

It would seem very much in place to raise a question that is basic to the entire use of physically marginal personnel. In fact it is basic to the whole manpower problem of the Armed Services. At the present time, the Army sets minimal physical standards for induction. Since the latter days of World War II, the standards have been on a three level scale in each of six items (general Physical strength, the Upper extremities, the Lower extremities, Hearing, Eyesight, and neuro-psychiatric condition). Using the capitalized letters, the profiles provided are called the FULFES system. The question that needs to be considered is that of using a general set of standards for admission to the Army, as against the determination of the physical qualifications needed for each MOS and the induction, training, and assignment of individuals accordingly. As a matter of fact a proposed revision of the physical requirements for induction into the Army is being prepared which is distinctly in the direction of variable physical standards.

^{2/} See references listed in Bibliography

The tradition of a uniform standard for induction probably derives from the traditional view that a man of a given rank is competent (presumably with proper training) to perform any assignment that is appropriate to his rank. That view has been undergoing progressive change since before World War II, witness the classification policies and practices, the career guidance program, and the program of personnel research. But up to the present the tradition of uniform minimum standards has apparently prevailed. Although it may appear to have been modified by the change in physical standards from time to time, at any one time there has generally been one set of physical standards for induction. The only variation has been the use of limited service personnel. The fact that all enlisted men go through the basic training appropriate for the infantryman may indicate that there is still the tacit assumption that all enlisted personnel must be competent to serve in the infantry, regardless of what their assignments are to be.

The proposed revision of physical standards referred to above takes into account both differences among MOS's and differences in the conditions under which the MOS's are to be used. Those conditions are (1) combat, (2) support, (3) base, and (4) selected overhead installations. In order to follow the discussion of the significance of the proposal, it would seem desirable to explain the mechanics of the physical profile. For each of the six profile factors represented by the FULHES system, there are four grades or levels of ability, designated by the numbers 1, 2, 3, and 4 (except for hearing for which there is no grade 3). Maximum ability is designated Grade 1. Grades 2 and 3 represent lesser degrees of ability, but not so low as to disqualify a man for induction into the Army. Up to the present, Grade 4 in any one of the six factors has been sufficient to disqualify a man for induction. Definitions of the several levels are given in AR 40-115 Physical Standards and Physical Profiling for Enlistment and Induction. The following illustrates the four grades for P (physical capacity or stamina): (1) able to perform maximum sustained effort over extremely long periods, (2) able to perform sustained effort over long periods, (3) able to perform sustained effort for moderate periods, (4) below minimum standards for induction.

For each enlisted man a physical profile is determined. Likewise for each MOS a minimum physical profile has been established. Thus for MOS 1745 (Light Weapons Infantry Leader) the physical profile is 111111, which means that only those men can be assigned this MOS who attain Grade 1 in all six physical factors. For MOS 1930 (Rocket Artillery Chief) the required minimum physical profile is 222211, while for MOS 1890 (Photo Interpreter) it is 221111. These physical profiles, originally based on opinions, undoubtedly need to be restated and established anew on the basis of careful job analysis and worker qualifications analysis.

The physical profiles mentioned in the preceding paragraph, for the illustrative MOS's, refer to combat units. In no case does an MOS under combat conditions carry a profile with a grade of less than 2 for any of the six factors, according to the proposal referred to. For the same MOS's used in support units the physical profiles required are either the same or very slightly lower. For the three MOS's given above the proposed physical profiles in support units are respectively 111111, 222221, 223111. For the same MOS's in base units, the proposed profiles may again be a little lower. But in no instance in either support units or base units does a proposed physical profile carry a grade of less than 3 for any of the six factors.

For selected overhead installations (such as depots, ports of embarkation, administrative headquarters, training installations) the proposed physical profiles for some MOS's include the grade of 4 for one or more of the factors, and in some instances for as many as three or four of them.

The use of variable physical standards might still be based on a uniform minimum physical profile acceptable for induction. However, the use of grade 4 for any of the six physical factors for some of the MOS's (even limiting this use to selected overhead installations) is the equivalent of doing away with a minimum uniform physical standard for induction.

What all this adds up to is that the meaning of the term "physically marginal personnel" is contingent on the policy of the military with regard to the use of minimal physical standards for induction. If such standards are maintained, all those who do not meet the standards, but who can still make a worthwhile contribution to war effort, may be regarded as falling under the heading of physically marginal personnel. If physical standards are set for specific MOS's in specified types of units, the concept of physically marginal personnel disappears. It would not be out of place to mention here that the question of the type of basic training required of enlisted personnel is a relevant item. Its significance is discussed below.

Basic Considerations. What has given rise to the question of the employment of physically marginal personnel? And what are the considerations that apparently must be taken into account in reaching a decision on this question?

For one thing, assuming the need for total mobilization and all-out war effort, our total manpower may be sufficiently less than that of the prospective combination of enemy powers to present a serious manpower problem. The condition is aggravated by the fact that those who came "of military age" in recent years and who will come of age during the next decade were born during the depression years when the number of births each year was relatively small. The number of births dropped successively until about 1936 and then rose only slowly until about 1942. Since then the rise has been more rapid especially during the last five years. Not until about 1960 can we expect to have each year the numbers of 18-year olds on which we could count in years past. In the present draft we find that the number of 19- and 20-year olds is small. The next year's 18-year olds, and the 18-year olds each year thereafter will be a successively smaller group until about 1954. The rise in numbers after that will not be large for several years.

The relatively large increase in population in the last decade has been due to a much increased birthrate. The percentage of young children in the entire population is now out of proportion and may be expected to continue so until the large numbers born since 1942 come of age. One serious implication of this condition will bear mentioning. If we are not careful, the attempt to save democracy may be at the expense of much that we have built up and developed. That may be inevitable. But the cost must not be too great. We have now in this country an unprecedented number of children of school age, and an unprecedented number of children who will attain school age during the next few years. If adequate personnel are not available to care for them, we may develop a generation of "displaced children" with a consequent loss of democratic ideals, standards, and our American way of life. In planning the

use of manpower under total mobilization, it would seem necessary not only to plan for military and supporting industrial and agricultural needs, but also, in so far as the demands for survival permit, to plan for the children who are the future of our country. This problem need not be approached as a matter of sentiment. It merits consideration as cold, hard fact.

Manpower is needed for the military services on the basis of total mobilization and an all-out war effort. Manpower is needed for civilian production of material and equipment required for the war effort, and for necessities of life. Manpower is needed for such necessary services as government, health, sanitation, protection, and education, to insure the continuity and permanence of our way of life and our institutions. Planning the personnel policies for the Armed Services must, of necessity, be considered in parallel with the manpower requirements for these other needs. But within the scope of manpower policy for the Armed Services, several problems merit consideration.

(1) The effect of change of policy. Physical standards were set comparatively high during the earlier stages of World War II when it was felt that the manpower supply was ample. By the end of 1944 the physical standards for induction into the Army were lowered considerably. Some men who were inducted, say in 1941, had by 1944 received technical training and had had several years of experience in technical services. There was too much invested in them to justify putting them into combat units in 1944. To do that would have meant retraining them as combat soldiers and training replacements for the technical services. As a result many of the men drafted in 1944 and trained for combat units were undoubtedly much less desirable as combat soldiers than were many others drafted earlier but who were not available as combat troops. In other words, policy which results in a revision of physical standards downward is bound to lessen the effective use of manpower in the Army. "Upward" revision of physical standards should not have such an untoward effect. If the standards are low to start with (or if there are no minimum physical standards for induction), the less able physically who are inducted can be trained and used in non-combat assignments, and the more able physically would then be available for combat units.

(2) Effect on rotation policy. Assuming that there is to be a policy of rotation, it must be recognized that the fraction of the time of a man's service in the Army that he spends overseas is a function of the relation of the number of persons overseas to the number in the ZI who are subject to being sent overseas. If, for the sake of concreteness, it may be assumed that the military force overseas will number, say, 6,000,000 and that the number in the ZI will be 4,000,000 then it would appear that, on the average, three-fifths of the time of military personnel would be on overseas duty and two-fifths in the ZI. However, if half of the 4,000,000 are physically impaired personnel, older persons, and women, who are not to be sent overseas, then obviously the rotation ratio is much less favorable. (This is of course an oversimplification, since it disregards training time and other factors.) In other words, policy decisions concerning the use of physically marginal personnel will, of necessity, affect whatever rotation policy is decided upon.

(3) Morale effect. It need hardly be pointed out that morale is of fundamental importance in war effort. And this reference is to civilian as well as to military morale.

There are two basic arguments for the use of women by the Armed Services, apart from the possibility that shortage of manpower may make the use of them essential without taking into account any other considerations. First, there is the favorable morale effect on the women of the nation arising from the realization that they are being called upon to participate actively in war effort on the same basis as the men. The reduction in the male population, if casualties are heavy, will have an unfavorable morale effect particularly on the female segment of the population. The latter, if carried to its logical conclusion, would mean the use of women in dangerous assignments--policy that may well not receive widespread support.

The morale effect of the use of the physically impaired and older workers presents another important consideration. No studies have been found that explain why physically impaired or older persons as a group have as good work records as have physically unimpaired or younger workers. There is, of course, the factor of maturity as well as experience of the older workers which make for greater responsibility, stability, and better production on their part. Perhaps the very favorable performance of physically impaired and older workers can be explained in large measure by psychological factors. The person who has lost a leg, or the use of an arm, or who suffers from a cardiac condition is likely to suffer from a feeling of hopelessness--the feeling that fate has dealt him a severe blow and that he can no longer be an independent human being. Once he is "rehabilitated" and finds himself on a job in which he can make good, he tends to "put out," to exert himself, to a point where he satisfies himself, those about him, and his superiors that he can and has made good. He finds himself on a par with the man at the machine or desk next to his, and he wants to be sure that nothing will happen to change the attitude of his workers or superiors to him. So he works harder, is less influenced by factors that might make others absent themselves from their jobs, and is less likely to seek other employment. To draft such physically impaired or older workers may well mean a very beneficial effect on that segment of the population, as far as their morale is concerned. The fact that despite their impairments or age their group is on a par with the rest of the population should be expected to have a positive morale influence on them.

At the same time, the use of such personnel by the Armed Services in appropriate capacities should make it possible to employ the younger and physically more able men in assignments more appropriate for them. It should also make possible the deferment for longer periods than would otherwise be possible of those with dependents and of those needed because of their technical abilities and training in civilian positions. The military use of physically impaired and older workers may thus have a beneficial morale effect on the population as a whole. At the same time it must be recognized that the greater the use of the physically less able in the less dangerous military assignments, the greater the likelihood that casualties will decimate the ranks of our physically more able young men. As part of the exigencies of a war for survival, this contingency must be taken into account.

(4) Financial problems. Military service by any individual involves certain financial responsibilities and risks on the part of the government. Under this rubric fall such items as insurance, pensions, bonuses, GI benefits, Veterans Administration services (such as hospitalization), and the like. There

is no question that those who serve in a military capacity are entitled to such benefits. It is important to find out, however, what the effect on the financial responsibility and risks of our government might result from the use in military capacities of physically impaired personnel, and older workers. Women are now used in the military service, but use of greater numbers will increase financial responsibilities and the like. The demands of an emergency may force into the background the question of cost. But apart from that contingency it would seem important to investigate the financial problems arising from the use of physically marginal personnel.

(5) Civilian needs. The conduct of war today demands a tremendous industrial and agricultural potential. This in turn makes its demands on the manpower potential of the country. Manpower planning for the nation must therefore include both military requirements and the requirements for civilians engaged in production of military material, equipment, etc. Civilian defense has also become a crucial element in modern warfare. Lack of civilian morale can result in defeat. Civilian morale might be readily destroyed if necessary precautions are not taken. Personnel for civilian defense must be recruited and trained for this purpose. Personnel planning on the national level must take into account these needs, as well as the need for furnishing food, equipment, and services for the civilian population both in order to maintain civilian morale and, insofar as conditions permit, our way of life and our standards of living.

Personnel planning cannot be done effectively, and particularly in an all-out effort, if it is done separately for the military and for civilian needs. In such overall planning the question is appropriately raised of whether or not it would be wiser to plan for the use first in civilian capacities of physically impaired and older workers, and secondarily for their use in military assignments. The military use of women is not called into question, although here again some consideration may be given to the relative degree of their use in military and civilian assignments. The token employment of physically impaired and older workers by the Armed Services may readily be justified for morale reasons. Beyond that, it may well be that, when all other considerations are taken into account, the most effective use of them may be in civilian capacities. A study should be made of civilian needs and the possibility of filling as many of those needs as possible with physically marginal or submarginal personnel. Bulletin No. 923 of the Bureau of Labor Statistics of the United States Department of Labor (The Performance of Physically Impaired Workers in Manufacturing Industries) lists the positions in which individuals with various types of physical impairments have worked successfully. The numbers of such positions are very large. For instance, for amputees lacking one hand, some 120 types of jobs are listed. Over 100 jobs are listed for amputees lacking one leg. There are very many jobs in which orthopedic, cardiac, vision, hearing, hernia, ex-tuberculous, peptic ulcer, diabetic, multiple impairment, and other cases have worked effectively. Until the need for and the possible use of the physically impaired in civilian capacities has been subjected to careful study, their use in military assignments may well be questioned.

The basic question of the use of physically marginal personnel by the military should probably be treated under two categories. The possible induction of physically marginal personnel has been discussed up to this point. The other is the retention by the military of those who while in the service have suffered

physical impairment. The problem is not quite the same. This latter group differs from physically impaired civilians in two ways. In the first place, they have acquired training, knowledge, and experience that may make them of continuing value to the Armed Services, albeit in capacities different from those in which their physical impairments were suffered. And in the second place it may be not out of place to argue that the government owes them a debt that can be paid in part by continuing to support them, permitting them to continue to the war effort, and furnishing them with training that can be of later benefit to them in civilian life. It would probably be wise for the Armed Services to follow the policy of permitting those who suffer physical impairment while in the service to continue in it if they so desire, to retrain them, and to provide them with appropriate assignments. The question of financial responsibility and risk does not rise so far as this group is concerned, since such responsibility and risk have already been assumed for them by the government.

(6) Type of basic training. All enlisted men who are inducted into the Army are put through the same pattern of basic training. The basic training is that needed to prepare a man for duty as an infantryman. There are, of course, many elements of the training that would be of value in any assignment in the Army. But it also includes much in the way of physical activity, marching, physical exercise, knowledge of the rifle and its use, and the like. If this type of basic training is still to be required of all enlisted men, then of course that policy would eliminate the possibility of using personnel other than those who can perform the activities required for it. If on the other hand basic training is to be suited to the assignment that the individual is to be given, a policy of using physically impaired and older workers would be feasible.

(7) Policy on overseas assignments. Related to the question on rotation is the whole question of whether, in the event that physically marginal personnel are used in military assignments, they will be sent overseas. In this connection there need to be taken into account the possibility of special provision that may have to be made for the physically impaired in transporting them overseas and in relation to their work activities, living conditions, and other activities overseas. There must also be considered transportation problems which might rise in the event of a tactical emergency. Unless they are kept so far behind the lines that a withdrawal would not affect them, commanders would be faced with the problem of furnishing transportation for them, possibly at the expense of combat troops for whom the transportation might be far more vital for the successful culmination of a military action. Special provision for housing facilities, work conditions, and normal transportation, engendered by the types of physical impairments that the individuals possess, may create enough of a problem to justify the decision that physically impaired personnel will not be sent overseas, if it is decided to use them at all.

(8) Special needs of the physically impaired. Apart from the question of overseas use of physically marginal personnel, the possibility must be considered of having to furnish for assignments within the ZI special conditions for physically impaired. Will they have to be housed close to the places where they work? Will the place of work within a given building have to be close to the entrance to avoid the need for moving long distances

and to permit easy egress in an emergency? Will stairs have to be replaced by ramps in any cases? Will living quarters with special characteristics have to be furnished? These and other relevant questions need to be studied in order to determine what is involved in the use in military installations of physically impaired individuals. These are practical questions. Apart from other considerations, the answers to these questions may well be the determiners of the policy on the use of the physically impaired.

(9) Type of draft. It has been the practice, as it still is, to draft for a given period a number of individuals that would take care of the overall needs of the Army for that period. The individuals are chosen by draft number, which is determined on a purely chance basis. They may be taken by age levels. But in any case the procedure is a completely impartial one. It eliminates the use of influence and bias to about as great an extent as human weaknesses will permit. After the individual is inducted, which means that he meets the requirements for induction then in force, and is put through basic training, he is classified and assigned. According to the present procedure, the Army may need, say, 50 bakers in a given month. Of the 50,000 or other number of inductees at that time, there may be none who are bakers. But 50 of the men inducted will be trained as bakers. The following month the Army may be in need of no more bakers, but among the new batch of inductees there may be 50 civilian bakers. They will be trained and used, but probably not as bakers. The illustration given is obviously over-simplified. But the fact is that the present draft procedure of necessity limits the extent to which the Army can make use of the civilian training and experience of inductees.

There is another type of draft procedure which is equally impartial and at the same time likely to be far more effective, to the extent that it can be put into effect. This calls for pre-classification of persons who are subject to the draft in broad categories, to include them in groups of occupations rather than in single jobs. Individuals might then be drafted according to the current needs of the Army, and impartially by draft number within occupational groups, or within age levels within occupational groups. In some cases, e.g. students with no occupational specialty, a general category may have to be created, the individuals in it being available for specialty training.

The question of the type of draft is raised since in the case of the physically impaired and older workers in particular there would seem to be little point in retraining them for a job other than the kind of civilian job for which they have already been trained and in which they are experienced. If physically impaired and older workers are to be employed by the Armed Services, drafting them would seem to make sense only if they are drafted for specific assignments that are akin to their civilian occupations. The problem of doing that while maintaining the regular draft needs to be taken into account.

Physical Standards. In the introductory paragraphs of this report, mention was made of physical standards for induction. As has already been pointed out, the policy on the use of physically impaired and older workers, as well as women, is necessarily contingent on the nature of such standards. If minimum standards are set for all inductees, then the physically marginal

will be ruled out of the picture. The alternatives are to set variable standards for different types of assignments or to set no overall minimum physical standards at all. In a sense these alternatives are the same for induction purposes. The difference between them appears only in connection with classification and assignment. In other words, variable standards would apply to specific jobs for assignment purposes, and if there were no overall minimum requirements for induction it would be necessary to determine the physical requirements for specific jobs as a basis for classification and assignment. Again, setting variable physical requirements would mean the induction of those who meet the requirements for assignments that carry the lowest physical standards, and that would be the equivalent of virtually no minimum overall standards at all.

Summary. The foregoing paragraphs have attempted to define the problem of the military use of physically marginal personnel, to clarify the meaning of the term "physically marginal personnel," and to present and discuss the issues that need to be considered in reaching sound decisions. Reference has been made only to the general findings of studies on the work records of physically impaired and older workers. The appended bibliography contains a number of references to such studies, as well as to various other sources that are relevant to the entire problem of the use of physically marginal personnel. No studies, reports, or data in any form have been found concerning the military use of physically marginal personnel, except for reference to 1400 disabled veterans who were permitted to reenlist. In that case, only opinions were available, but nothing in the way of an actual study. All studies listed in the appended bibliography refer to civilian employment of physically impaired and older workers.

Whether or not other studies need to be made will depend in the first instance on the policies that are decided on, and in the second instance on what information can be obtained concerning the military use of physically marginal personnel in other countries. At the present stage of this project it would seem that policy decisions should precede the conduct of studies rather than the reverse. Or at least if it is known what policies are under consideration, it can be determined what information is required as a basis for arriving at decisions, and therefore what studies need to be conducted in order to obtain the desired information. The following is a list of studies that it may be desirable to conduct on the basis indicated. The studies are listed in the form of questions.

Which Army jobs can be filled by physically marginal personnel?
How many such jobs of each kind are there? Which types
of physically marginal persons could perform each job
satisfactorily? How many persons of each type would be
available?

What is the total available manpower that would fall under
the category of "physically marginal personnel"? What
fraction of the total available manpower resources do
they comprise? To what extent would their availability
increase the manpower resources of the country?

What special physical facilities or other provisions need to be furnished by civilian industry for physically impaired and older workers? What special working and living provisions would have to be furnished by the military, were such workers to be used in military units and installations?

What financial risks and responsibilities does private industry have to assume as a result of the employment of physically impaired and older workers? What financial risks and responsibilities would the government have to assume as a result of the military use of physically impaired and older workers, over and above the responsibilities and risks assumed for physically unimpaired personnel?

To what extent and in what ways may it be expected that hospital, nursing, and other medical facilities may require expansion as a result of the military use of physically marginal personnel?

What are the psychological factors that have produced the favorable work records of physically impaired and older workers, and to what degree can they be provided by the armed services?

What may be the morale effect of the use of the several categories of physically marginal personnel (1) on the physically marginal themselves? (2) on the population in general?

To what extent and in what ways could the use of physically marginal personnel in civilian activities release physically able persons for military assignment who otherwise might not be so available?

What types of basic training would be suitable for physically marginal personnel, and what provision can the armed services make for such special or varied training?

What problems would the overseas assignment of physically marginal personnel give rise to, and to what degree can the Army take care of them?

The point should be stressed that, in view of the evidence concerning the effectiveness of the several categories of physically marginal personnel in many types of jobs in civilian industry, the basic problem is not one of determining whether the physically impaired, older workers, or women may be used to advantage in military assignments. The problem becomes one of management, of policy decisions. When appropriate consideration has been given to policies concerning the use of physically marginal personnel, studies can be undertaken to obtain the needed relevant information.

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